

# GREEN RIDGE STATE FOREST

## ANNUAL WORK PLAN

FISCAL YEAR 2014

Prepared:

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3/26/13  
Date

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3-27-13  
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## **State Forest Annual Work Plan**

### **A. Forest Overview**

Includes an over site of the forest; history, size, location, special features, etc.

### **B. AWP summary**

Includes number of sales, total harvest acres, acres by harvest method, estimated harvest volume and other important features for the work to be performed during the next year..

### **C. Maintenance Projects**

Includes boundary maintenance, road maintenance, building maintenance and other such projects.

### **D. Recreation Projects**

Includes projects such as campsite improvements, hunting programs, special recreational activities, ATV and hiking maintenance, trail grants, signage, and other projects specific to benefiting recreational users of the forest.

### **E. Special Projects**

Includes activities to gain or maintain third party forest certification, GIS databases, and other such activities.

### **F. Silvicultural Projects**

Includes forest harvesting, prescribed fire programs, fertilization, reforestation, and other such projects. This section include the following:

#### **Final Silvicultural Activities:**

1. Site Map
2. Silvicultural Prescription
3. Stand Data

#### **Review Process:**

1. Review Summary
2. Interdisciplinary Team Comments (collective)
3. Advisory Committee Comments
4. Public Comments

### **G. Watershed Improvement Projects**

Includes special projects to enhance water quality, wetland restoration, and other such activities.

### **H. Special Wildlife Habitat Projects**

Includes Special Wildlife Habitat Areas plan development and implementation and other wildlife habitat improvement practices.

### **I. Ecosystem Restoration Projects**

Includes projects to manage exotic invasive species, management activities within High Conservation Value Forests other such activities aimed at improving ecosystem health and vitality.

### **J. Monitoring Projects**

Includes CFI forest inventories, and other inventory projects being conducted on the forest, watershed monitoring, a other such projects.

### **K. Budget**

Include proposed budget specific to the forest.

## **Forest Overview**

Green Ridge State Forest is located in eastern Allegany County. It is the only State Forest located in the Ridge and Valley province. Green Ridge receives the least amount of rainfall in Maryland, averaging 36 inches annually. Consisting of 47,560 acres, Green Ridge is the largest contiguous block of forestland in Maryland within the Chesapeake Bay watershed. It accounts for about 30% of the State Forest System and approximately 12% of all DNR land in Maryland.

The general geographic boundaries of Green Ridge are Town Creek to the west and Sideling Hill Creek to the east. The northern boundary extends to the Mason-Dixon Line. The southern boundary parallels the Potomac River.

Elevations range from 500 feet above sea level on the Potomac River to 2,000 feet on Town Hill.

Three Major highways traverse the forest in an east to west direction: Route 144, Maryland Route 51, and Interstate 68.

In the early 1800's, Richard Caton and William Carroll in partnership owned much of the land that is Green Ridge State Forest today. Richard Caton was the son-in-law to Charles Carroll of Carrollton, a signer of the Declaration of Independence. William Carroll was the grandson of Daniel Carroll of Rock Creek, a framer of the United States Constitution. The land was originally patented from vacant lands during the 1820-1840 period for inclusion into various timber and mining interests, primarily the Town Hill Mining, Manufacturing, and Timber Company. This business venture was financed by the estate of Charles Carroll of Carrollton. The crumbling stone structure known as the Carroll Chimney, part of the steam-powered sawmill built in 1836, is the only known surviving structure of that period.

In the 1880-1912 era, most of the remaining virgin forest was cut and a period of neglect resulted in numerous wildfires. During the early 1900's, the Mertens family of Cumberland attempted to convert the forest into apple orchards and promoted it as "The Largest Apple Orchard in the Universe."

The orchard was subdivided into 10-acre parcels and sold to individuals as investment properties. Five acres of each property parcel was cleared, burned, and planted into apple trees. The remaining five acres had the best trees cut and the poorer trees were left standing. The orchard company went into bankruptcy in 1918. The interests of the corporation were acquired by the State Department of Forestry in 1931.

The first forest management activities at Green Ridge were performed by the Civilian Conservation Corps (CCC) in the 1930's. Their main focus was fire control. Other work consisted of building roads, trails, recreation enhancements, and the management of existing forest for its future timber and wildlife potential.

# **Green Ridge State Forest**

## **Fiscal Year 2014**

### **AWP Summary**

This work plan includes three silviculture proposals for a total of 281 managed acres within the 24,414 acre general management zone in which area based sustainable forest management is practiced. Within these managed acres, end of rotation harvests are proposed to regenerate the stands while salvaging ice damaged forest resources. These harvests are proposed due to near total mortality of the overstory trees that resulted from a catastrophic hail storm event. There will be some variation between managed acres and actual harvest acres to provide for various buffers and/or retention areas.

On 27 May 2011 a major storm event producing very large hail impacted stands in the Mertens Avenue/Oldtown Road intersection area of the forest causing significant canopy loss. One year later the damage was evaluated and we learned that significant mortality occurred in approximately 400 acres of mature oak stands. The silviculture proposals in this work plan are the result of responding to this mortality. These proposals will focus on regenerating these stands while salvaging the timber loss. Once these salvage proposals are approved, they will be moved ahead to be accomplished during the FY-2013 operation cycle to salvage the timber while it is still merchantable. In return, an equivalent number of proposals approved in the FY-2013 AWP will be held for the FY-2014 operation cycle.

The silviculture proposals within this plan include 281 acres of variable retention harvests for an estimated 1,090mbf of hardwood timber.

Another major project proposed in this AWP is the GRSF Motorized Access Network; Restoration and Sustainable Environmentally Sensitive Maintenance of East Valley, Twigg, and Gordon Road Project. This project will restore environmental sustainability of three dirt and gravel roads on the forest while improving public access to areas of the state forest.

In addition to the above projects, other maintenance, recreation, ecosystem restoration, watershed improvement, monitoring, and special projects are included in this plan. Specific projects are described within the following pages.

## **Maintenance Projects**

General Maintenance will continue such as maintaining 100 primitive campsites, hazardous tree removal, pole gate installations as needed, mowing and maintenance of handicap access hunting areas, and general maintenance of headquarters complex, shooting range, and outbuildings.

1. GRSF Motorized Access Network; Restoration and Sustainable Environmentally Sensitive Maintenance of East Valley, Twigg and Gordon Road Project.
2. Recover 3 miles of boundary & re-blaze 20 miles of existing state forest boundary.
3. Continue to maintain 100 primitive camp sites.
4. Continue to maintain public shooting range.
5. Continue to maintain viewsheds on 5 overlooks.
6. Continue to maintain 4 handicap hunter access roads.

## Trails and Recreation Capital Improvement Proposal for Green Ridge State Forest

Project Title: **GRSF Motorized Access Network; Restoration and Sustainable Environmentally Sensitive Maintenance of East Valley, Twigg and Gordon Road Project.**

Total Project Funds Requested: \$550,000.00

Background: This project will restore ecological sustainability to **East Valley (8.7 miles), Twigg (2.2 miles) and Gordon (3.0 miles) Roads** and restore motorized public access to recreation features within Green Ridge State Forest. In 2010 DNR made the difficult decision to close East Valley Road to all motorized traffic because the road surface is no longer ecologically sustainable and has become dangerous for vehicle traffic. This decision reduced public access to the forest significantly and included closure of approximately eighteen miles of motorized access and seven campsites. East Valley Road was closed to all public motorized traffic because it had become degraded to the point that it was no longer ecologically sustainable as well as become impassable for most licensed vehicles. Much of this degradation was caused by ATV Traffic. East Valley Road is no longer designated as an ORV Trail. Public ATV traffic has proven to be an inappropriate use of this resource. However, DNR wishes to restore this road to eliminate sediment and erosion control problems and restore motorized recreation access for licensed motor vehicles.

Gordon Road and Twigg Road remain open to licensed motor vehicles despite the poor road conditions. Both of these roads have long been in need of major reconditioning to improve environmental conditions and transportation function.

**Project Design – the Solution:** This project will address the problems described above utilizing environmentally sensitive best management practices for dirt and gravel roads and restore motorized public access to the forest. Water quality and aquatic habitat in Fifteen Mile Creek and Town Creek watersheds will be enhanced by eliminating excessive erosion from the road surface and safely diverting road runoff before it enters the streams.

Specific work to be completed includes replacement of over thirty failed culverts and installation of additional cross pipes where needed. Other water diversion structures will be used in conjunction with ditches, culverts and cross pipes to decrease volume and velocity of water on these roads. These diversion structures will include rolling dips, broad based dips, and turnouts.

These roads are also incised and will require installation of significant amounts of new aggregate to facilitate adequate crowning of the road and proper installation of cross pipes.

Monitoring and Maintenance: The Green Ridge State Forest Manager and staff are committed to long term environmentally sensitive maintenance and continuous monitoring of this implementation project. The State Forest will include this project in their Transportation Inventory and Maintenance Plan and assume the responsibility for long term maintenance of this project. An ecologically sustainable transportation system is a requirement of the state forest to maintain FSC and SFI Forest Certification.

Alternatives: The likely alternative to this project proposal is that these roads will continue to deteriorate creating additional ecological degradation to waterways and habitats while remaining closed or needing to be closed to public access to state forest trails, campsites, hunting access and other public recreation on these sections of the forest.

## **Recreation Projects**

- 1.** Maintain approximately 60 miles of trails including 50 miles of hiking trails and 12 miles of mountain bike trail..
- 2.** Continue to enhance upland game hunting opportunities by enhancing early successional wildlife habitat at Kirk Orchard, Bull Ring Ranch, Malcolm Road, and Kasecamp Bottomlands.
- 3.** Provide 2-4 guided interpretive tours on the forest to share management principles and practices with the public.
- 4.** Continue to maintain and enhance a virtual geocaching program to interpret county and state Big Tree champions within the forest as well as other natural and cultural heritage assets of the forest.



## **SPECIAL PROJECTS**

### **A. Forest Stand Delineation and Inventory:**

A Critical part of developing long term sustainable management plans is the availability of up to date forest inventory data. To this end, the state forests staff has been fully engaged in revising the forest stand delineation on the forests. The process continues to consume considerable staff resources as this project is taking shape. This ambitious undertaking will involve collecting detailed stand inventory data on approximately 1700 stands over the entire state forest. The data will be collected, analyzed, and entered into the GIS database. Staff assignments and field operations have been adjusted to assure the timely and accurate completion of this important field level assessment that will serve as the basis which we will draw management decisions from for the next 10-15 years. The department's goal is to have this project completed by FY-2016.

### **B. Continue to Network with Partners:**

GRSF is committed to being a "teaching forest" and strives to reconnect people to the land through providing forest management tours for the general public, hosting training sessions and forest resource-based events, service learning projects, and serving as natural laboratory for schools and universities.

1. Maintain working relationship with Garrett College – Forestry classes use forest as training laboratory and implement practices directed by Forest Manager.
2. Maintain working relationship with Allegany College of Maryland-Forestry Program will use GRSF for forestry lab and site for their Summer Harvesting Course. GRSF will provide a site where timber can be extracted as part of harvesting course in return for in-kind services.
3. Continue participation with Appalachian Forest Heritage Area (AFHA) Forest Manager serves as Executive Board member.
4. Continue partnership with the Ridge and Valley Stream Keepers (RVSK). GRSF provides meeting room and shares information in return RVSK monitor water quality in the streams within GRSF.
5. Cooperate with American Chestnut Foundation. GRSF staff continues to maintain a 50- tree American Chestnut plantation at Kirk Orchard.
6. Continue partnership with Wildlife Institute to work on Appalachian Mountain Woodcock Initiative to enhance American Woodcock habitat on the forest.
7. Continue to support and collaborate with Volunteer Team Incorporated to facilitate the spirit of service on the forest and reconnect people to the land.
8. Continue to participate in I&E Programs including Arbor Day, Project Learning Tree, Becoming an Outdoors Woman, Natural Resources Careers Camp, etc..

# Green Ridge State Forest

## Fiscal Year 2014

### Silviculture Projects Summary

<u>Proposal Name</u>	<u>Compartment</u>	<u>Managed Ac.</u>	<u>Harvest Ac.</u>	<u>Est (mbf)</u>	<u>Prescription</u>
1 Stafford Rd	56/57	121	121	480	SLVG
2 Oldtown Orleans Rd	58	127	127	485	SLVG
3 Mertens Ave.	64	33	33	125	SLVG

*Total	281	281	1090mbf
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Abbreviations for prescriptions:

TSI     Timber Stand Improvement

VR     Variable Retention

SLVG   Salvage